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(FILE 'HOME' ENTERED AT 14:53:25 ON 29 MAY 2007)

FILE 'CAPLUS, MEDLINE' ENTERED AT 14:53:40 ON 29 MAY 2007

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L1      3 S GLYCOPROTEIN? (P) ?AMMONIA? (P) ?BORANE?
L2      19 S GLYCOPROTEIN? (P) ?BORANE?
L3      16 S L2 NOT L1
L4      208 S GLYCOPROTEIN? (P) ?AMMONIA?
L5      0 S L4 AND BORON HYDRIDE?
L6      2 S L4 AND BOROHYDRIDE?
L7      0 S GLYCOPROTEIN? (P) ?AMMONIUM HYDROXIDE?
L8      11 S GLYCOPROTEIN? (P) ?AMMONIUM HYDROXIDE?
L9      0 S L8 AND ?BORO?
L10     0 S L8 AND ?BORA?
L11     152 S ?AMMONIA? (P) ?BORANE? (P) COMPLEX?
L12     11 S L11 AND CLEAV?
L13     3 S L12 AND OLIGOSACCHAR?
L14     8 S L12 NOT L13
L15     6 S L11 AND GLYCO?
L16     7 S L11 AND ?GLYCO?
L17     3 S L11 AND ?SACCHAR?
L18     0 S L11 AND ?PROTEOGLYCAN?
L19     3 S L11 AND ?PROTEIN?
L20     30 S ?AMMONIUM? HYDROXIDE (P) ?BOROHYDRIDE? (P) ?AMMONIUM?
L21     0 S ?AMMONIUM? HYDROXIDE (P) ?BOROHYDRIDE? (P) ?GLYCOPROTEIN?
L22     2 S ?AMMONIA? (P) ?BOROHYDRIDE? (P) ?GLYCOPROTEIN?
L23     130 S ?CLEAV? (P) ?BOROHYDRIDE? (P) ?GLYCOPROTEIN?
L24     52 S L23 AND ALKALI?
L25     6 S L24 AND ALDITOL?
L26     46 S L24 NOT L25
L27     3 S L26 AND COMPLEX?
L28     43 S L26 NOT L27
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L1 ANSWER 3 OF 3 MEDLINE on STN  
 ACCESSION NUMBER: 2002361578 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 12112272  
 TITLE: Matrix-assisted laser desorption/ionization mass spectrometry compatible beta-elimination of O-linked oligosaccharides.  
 AUTHOR: Huang Yunping; Konse Tomonori; Mechref Yehia; Novotny Milos V  
 CORPORATE SOURCE: Department of Chemistry, Indiana University, Bloomington, IN 47405, USA.  
 SOURCE: Rapid communications in mass spectrometry : RCM, (2002) Vol. 16, No. 12, pp. 1199-204. Journal code: 8802365. ISSN: 0951-4198.  
 PUB. COUNTRY: England: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T) (RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)  
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AB A new beta-elimination procedure has been introduced to cleave O-linked oligosaccharides from low- to sub-microgram amounts of glycoproteins prior to analysis by mass spectrometry. Borane-ammonia complex in aqueous ammonia is used as a cleaving solution alternative to the sodium borohydride/sodium hydroxide medium conventionally used in beta-elimination. The procedure results in minimum sample purification, leading to minimal sample loss and consequently an overall enhancement in sensitivity. It was applied successfully in the analysis of bovine fetuin and submaxillary mucin, as well as to a complex bile-salt-stimulated lipase glycoprotein isolated from human milk.  
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